

JACOBEAN SPLENDOUR

The restoration of 200m² of decorative ceilings dating from the Jacobean period challenged the flexibility of modern products, finds *Kaye Alexander*

Apethorpe Hall, near Oundle in Northamptonshire, which dates back to the 15th century, has one of the finest sets of Jacobean interiors of the period, but has been left unoccupied since 1982. The consequent deterioration of the building fabric and numerous ill-advised modifications made throughout its history (it was converted into a school in 1950) had threatened its future.

After a long and complicated process of statutory action begun by English Heritage (EH) in the mid 1990s, a Compulsory Purchase Order was confirmed and EH took over the property in September 2004.

The decorative ceilings of the state apartment suite on the first floor were of particular interest to EH, including that of the 34m-long Long Gallery. This area of the house was built between 1622-4 on the command of King James I, who visited 11 times during his reign. About 200m² of ceilings were included in Phase 1 of the £4 million restoration programme, completed earlier this year.

Plasterer Philip Gaches was contracted to work on the project owing to his extensive experience. 'Even though we have worked on Jacobean ceilings before, every job is different and we had to learn everything over again,' he says. 'It's not like today where there are a limited number of products on the market that can only be used in one way.'

First the ceilings were thoroughly cleaned and numerous layers of paint removed. Then the cracks were blown with compressed air to remove any debris. 'In the 1740s, the roof space was converted into rooms,' says Gaches. 'During this work huge sections of triangulation were cut from the principle trusses. This

caused the whole structure to move and large cracks developed in the ceiling plaster below, in line with the trusses. The plaster had become detached and there was also some water coming in.'

Despite these problems only about 1m² of the original plaster had to be entirely removed, in an area where the timber beam above had broken. This conforms to the approach of 'consolidation and repair' described by project architect Mark Balkham of Rodney Melville and Partners.

The cracks in the preserved plaster were filled with a lime mortar mix. Its consistency is a close match as possible to the original, which, after samples were examined, revealed a huge quantity of goat hair. Gaches explains:

'Hair is used to form a network within the mortar, like mesh'

'Hair is used to form a network within the mortar, like mesh, but we found 10 times the amount you might find in a typical Victorian or Georgian lime mix.' The ceilings were then finished with distemper.

The lathing technique used by Gaches is a process whereby small pieces of hand-split riven oak or chestnut are nailed to the ceiling where the plaster is to be applied. These pieces, 25mm wide and 4mm thick, are fixed to the ceiling joists at 10mm intervals. When the first layer of plaster is applied it squeezes into these gaps, folding around the wood to form a hook. This substrate holds the ceiling in place. ■



This image Before and after showing the painting of one of the ceiling's ornate details
Far left top Structural support for the Long Gallery ceiling
Far left bottom Large cracks in a plaster detail before restoration